Serial No. 10/669,831 Attorney docker; 22681 US

AMENDMENTS TO THE CLAIMS

1. (currently amended) A compound having the structure

1-X-(C=Y)m-L-A

wherein I is an HIV protease inhibitor selected from the group consisting of lepinavir, said inhibitor lacking only a hydroxyl or an amino group.

X is O or NR wherein R is H or lower alkyl.

Y is O. S or NH,

m is 0 er-1.

L is a linker comprising from 0 to 40 carbon atoms arranged in a straight-chain or a branched chain, saturated or unsaturated, and containing up to two ring structures and 0.20 beteroatoms, with the proviso that not more than two beteroatoms may be linked in sequence, and

A is an activated <u>ester functionality chosen from the group consisting of active esters</u>, isocyanates, isothocyanates, thiola, imideesters, anhydrides, maleimides, thiolactones, diazonium groups and aldebydes.

2. (cancelled)

 (currently amended) The compound of claim 1 wherein X is Q, Y is Q and m is 1 A is succinimido-oxycarbonyl.

4-20 (cancelled)

- (previously presented) The compound O^c-(succinimido-oxycarbonyl-butyryl-aminocaproyl)lopinavir.
- (previously presented) The compound O^c-[4¹-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]lopinavir.

23-30 (cancelled)

31. (currently amended) A compound having the structure

(I-X-(C=Y), I-Z], P

wherein Lis an HIV protease inhibitor selected from the group consisting of lopinavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR wherein R is H or lower alkyl.

Y is O. S. or NH.

m is 0 or 1,

L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence,

Z is a moiety selected from the group consisting of -CONH-, -NHCO-, -NHCONH-, -NHCSNH-,

P is selected from the group consisting of polypeptides, polysaccharides and synthetic polymers, and

n is a number from 1 to 50 per 50 kilodaltons molecular weight of P.

- 32. (cancelled)
- 33. (original) The compound of claim 31 wherein P is an aminated dextran.
- 34. (original) The compound of claim 31 wherein P is bovine serum albumin.
- 35. (original) The compound of claim 31 wherein P is keyhole limpet hemocyanin.
- 36. (original) The compound of claim 31 wherein P is Limitus polyphemus hemocyanin.
- 37. (original) The compound of claim 31 wherein P is bovine thyroglobulin.
- 38-47 (cancelled)
- (previously presented) The compound O^e-(succinimido-oxycarbonyl-butyryl-aminocaproyl)lopinavir conjugate with KLH.
- (previously presented) The compound O°-[4"-(succinimido-oxycarbonyl)-benzoyl-aminocaproyl]lopinavir conjugate with BSA.
- 50-51 (cancelled)

52. (currently amended) A compound having the structure

wherein I is an HIV protease inhibitor selected from the group consisting of lopinavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR wherein R is H or lower alkyl.

Y is O. S. or NH.

m is 0 or 1,

L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence,

Z is a moiety chosen selected from the group consisting of -CONH-, -NHCO-,-NHCONH-, -

Q is selected from the group consisting of non-isotopic labels,

and n is a number from 1 to 50 per 50 kilodaltons molecular weight of Q.

- 53. (cancelled)
- 54. (original) The compound of claim 52 wherein Q is biotin.
- 55. (cancelled)
- (previously presented) The compound O^c-[4'-(1-biotinyl-amino-3,6-dioxa-octylamino)terephthaloyl-aminocaproyll-lopinavir.
- 57-58 (cancelled)
- 59. (currently amended) An antibody generated in response to a compound having the structure:

[I-X-(C=Y), I-Z], P

wherein Lis an HIV protease inhibitor selected from the group consisting of lopinavir, said inhibitor lacking only a hydroxyl or an amino group,

X is O or NR-wherein R is H-or-lower alkyl,

Y is O, S, or NH,

m is 0 or 1.

L is a linker comprising 0 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and further comprising up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms are linked in sequence,

Z is a moiety selected from the group consisting of -CONH-, -NHCO-, -NHCONH-, -NHCSNH-,

P is selected from the group consisting of polypeptides, a polysaccharides, and synthetic polymers,

and n is a number from 1 to 50 per 50 kilodaltons molecular weight of P.

- 60-65 (cancelled)
- 66. (original) An antibody generated in response to the compound of claim 48.
- 67-80 (cancelled)
- 81. (new) A compound having the structure

wherein

Y is O.

m is 1,

L is a linker comprising from 1 to 40 carbon atoms arranged in a straight chain or a branched chain, saturated or unsaturated, and containing up to two ring structures and 0-20 heteroatoms, with the proviso that not more than two heteroatoms may be linked in sequence, and

A is an activated ester.

82. (new) The compound of claim 81 wherein A is succinimido-oxycarbonyl.